

April 19, 2012

VIA ELECTRONIC FILING

Jocelyn Boyd, Esquire
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

Re: Statement of Position of Southern Alliance for Clean Energy on Duke Energy Carolinas's Residential Neighborhood Program, Appliance Recycling Program and Home Energy Comparison Report Program, Dockets No. 2012-168-E, 2012-156-E, 2010-50-E.

Dear Ms. Boyd:

The Southern Alliance for Clean Energy ("SACE") files this Statement of Position letter to comment on Duke Energy Carolinas, LLC applications for two new energy efficiency programs, the Residential Neighborhood Program ("RN program") and the Appliance Recycling Program ("AR program"), which Duke Energy filed on April 11, 2012, and to comment on its application to commercialize its My Home Energy Report Program ("HER program", based on the results from the Home Energy Comparison Report Pilot Program.¹

SACE generally supports Duke Energy's applications for approval of the RN, AR and HER programs. We have reviewed these program applications and are familiar with similar programs that are being implemented by other utilities in the Southeast.

Support for Residential Neighborhood Program

SACE is very enthusiastic that Duke Energy is interested in shifting its low-income program towards a neighborhood implementation model. The measures that the Company is offering in the proposed RN program appear to be the standard offerings for a community implementation model EE program. As the application notes, this program is very similar to what Progress Energy Carolinas offers in its Neighborhood Energy Saver program.

SACE has researched Progress Energy's implementation of its Neighborhood Energy Saver program, which demonstrates savings and costs of the program consistent with its other residential programs.² Progress Energy estimated that the levelized cost of the program is \$47/MWh in its cost-recovery filing last year, and anticipates a similar cost in its South Carolina filing this year.³ Similarly, Duke Energy projects that its RN program will also be cost-effective,

¹ SACE is not filing for intervention in 2012-1689-E, 2012-156-E, 2010-50-E because we do not anticipate participating in these dockets beyond submitting this Statement of Position letter. We are aware of the limited manner in which such a letter submitted by a non-party may be considered where a specific application is at issue.

² See our discussion at <http://blog.cleanenergy.org/2011/11/01/low-income-energy-efficiency-progress/>.

³ Progress Energy Carolinas, Application for DSM/EE Rider and Filing Requirements, South Carolina Public Service Commission, Docket 2012-93-E, Exhibit No. 1, Revised March 16, 2012.

1.866.522.SACE
www.cleanenergy.org

P.O. Box 1842
Knoxville, TN 37901
866.637.6055

34 Wall Street, Suite 607
Asheville, NC 28801
828.254.6776

250 Arizona Avenue, NE
Atlanta, GA 30307
404.373.5832

P.O. Box 8282
Savannah, GA 31412
912.201.0354

P.O. Box 1833
Pittsboro, NC 27312
919.360.2492

P.O. Box 50451
Jacksonville, FL 32240
904.469.7126

with cost test scores that are comparable with energy efficiency programs that are offered for all income classes.

Table 1. Cost Test Scores for Duke Energy Carolinas Residential EE Programs⁴

Program	UCT	TRC	RIM	Participant
<i>Proposed Residential Neighborhood</i>	<i>1.49</i>	<i>2.86</i>	<i>0.64</i>	
Existing Low Income Program -12 CFLs	1.84	1.64	0.66	
Existing Residential Energy Assessment	2.56	2.56	0.74	
Existing EE Education	2.00	2.03	0.79	
Existing Residential Smart Saver - Property Manager	3.45	2.38	0.79	6.24
Existing Residential Smart Saver - Discount CFL	3.17	2.66	0.78	9.13
Proposed Residential Smart Saver HVAC ⁵	2.25	1.91	0.76	4.37
<i>Proposed Appliance Recycling</i>	<i>2.71 - 3.03</i>	<i>3.69</i>	<i>0.80 - 0.82</i>	

Although the Commission has not established specific policies regarding low-income programs, utility regulators often waive requirements to pass cost-effectiveness tests (and thus allowing for more costly marketing or incentives than would normally be offered) because of an interest in ensuring that low-income ratepayers have the opportunity to benefit from energy efficiency programs.⁶ However, as illustrated in Table 1 above, the proposed RN program has similar cost-effectiveness test scores as other programs offered to residential customers. Accordingly, SACE suggests that there is no need to balance the interests of assisting low-income customers with policies to ensure cost-effectiveness and limit impacts to ratepayers as a whole.

Over the course of the pilot, SACE encourages Duke Energy to seek partnerships with low income assistance agencies that will provide assistance to residents of homes that do not meet safety codes. A common issue with low-income programs is that utility program contractors are unable to install efficiency measures where additional work is required to comply with safety codes. Coordination of efficiency measure and safety code assistance will expand customer benefits without taking on additional responsibilities.

SACE also encourages the Company to consider how it can offer more holistic home air sealing through the current program. Attic air sealing and sealing ducts can significantly improve the building envelope, but can be relatively costly to implement as stand-alone measures (rather than as part of a larger program). Considering that a contractor is already at the resident's home, a simplified air sealing project may be feasible at relatively low cost.

Suggested Change: Qualification Standards of Residential Neighborhood Program

⁴ E7 Sub 831, update to cost-test scores. Filed 12/21/2011. Based on conversations with the Company, these are the most recent cost-test scores for the Residential Smart Saver program. There have not been updated cost-test scores filed in South Carolina since 2009-226-E.

⁵ With proposed program changes filed in E-7 Sub 831 on February 22, 2012. Low incentive cost-test scores from Attachment B.

⁶ See, for example, orders of the North Carolina Utilities Commission with respect to Duke Energy's programs in Docket E-7, Sub 831 on February 26, 2009 and with respect to Progress Energy's programs in Docket E-2, Sub 931 on June 15, 2009.

Duke Energy's application states that "Neighborhoods in which approximately 50% of the households have incomes of 0%-200% of federal poverty guidelines can qualify to participate." SACE suggests that the Commission consider removing this restriction if it approves this program.

SACE does not object to Duke Energy using this criterion for the purpose of identifying and prioritizing the neighborhoods in which the RN program is offered. Nevertheless, SACE suggests that the overall cost-effectiveness of this program justifies relaxing the rigor of the qualification and prioritization process in order to best meet the goal of serving "neighborhoods where the majority of residents are low income."

For example, if a low income neighborhood is in close proximity to a middle income neighborhood which is also served by the same schools and community centers, program impacts may be increased with little additional overhead by including the middle income neighborhood. Provided that the program remains cost-effective, allowing this increased flexibility in neighborhood selection should be in the public interest and provide Duke Energy with greater opportunity and incentive to reach as many neighborhoods as possible.

The value of extending this program opportunity to middle income households is suggested by a recent study by Lawrence Berkeley National Lab. The LBNL study identified that middle income households face significant challenges to investing in energy efficiency upgrades, and identified that a "start with the basics" approach is an effective strategy for helping overcome those challenges.⁷ While the focus of the RN program should remain on low-income communities, opportunities to serve middle income customers are an opportunity to develop critical experience that could lead to new program offers.

Appliance Recycling Program

As shown in Table 1, above, Duke Energy's proposed AR program is very cost-effective as compared to its other residential programs. Duke Energy is considering offering a \$30 - \$50 incentive for refrigerators or freezers, which is generally in line with what other utilities in the Southeast are offering, as shown in Table 2, below. Furthermore, Duke Energy's program costs are generally in line with what the other utilities are offering: approximately 17-22 cents per first year kWh savings.

Table 2. Southeastern Utility Appliance Recycling Programs

Utility	Incentive	Annual budget	Annual savings (kWh)
Duke Energy	\$30 - \$50	\$984,432 - \$1,089,412	5,312,857
Progress Energy	\$50	\$2,783,516	15,981,000
Georgia Power	\$20 - \$25	\$366,927	1,626,873

DEC may want to consider leveraging the Energy Star "Recycle Your Old Fridge" campaign in its marketing materials, as it is an ongoing campaign that may raise awareness at lower costs.

My Home Energy Report Program

SACE applauds Duke Energy's thorough pilot testing of the Home Energy Comparison Report program and its decision to put forward a program that reaches a wide audience. Based on materials provided by Duke Energy to its Collaborative, the pilot program EM&V report, and

⁷ Zimring, M., et al., "Delivering Energy Efficiency to Middle Income Single Family Households." LBNL-5244E. December 2011.

conversations with Duke Energy staff, we believe that the program has a good opportunity to be *more* cost-effective in practice, as compared to how the program is filed.

- The Home Energy Report will be an opportunity to increase awareness of other energy efficiency programs offered to the customer. While these savings will properly be attributed to the “other” program (e.g., Smart Saver), the HER program helps achieve the economy of scale that leading energy efficiency programs leverage to achieve high impacts at low costs.
- Expansion of the program to North Carolina will likely result in economies of scale that allow unit costs to be somewhat lower than experienced during the pilot.
- The opportunity to shift to electronic delivery of the reports at the customer’s option will also reduce costs.

The results of the HER pilot EM&V report suggest that energy efficiency savings from the program may be attributed to both voluntary installation of energy efficiency measures (e.g., CFLs and insulation) and to behavioral changes in the household (e.g., adjusting thermostats or using less hot water). We note that in many circumstances, thermostat adjustments or reduced hot water use may occur without degrading the level of comfort or service.

Historically, EM&V programs for consumer education have found it difficult to attribute energy efficiency savings to behavioral change. For example, the Energy Star program suspended its programmable thermostat specification in 2009 due to the need for consumer education on their effective use.⁸

As demonstrated in Duke Energy’s EM&V report, energy savings due to behavioral change can be attributed to the HER report through use of a control group reference baseline. While some participants may have taken energy conserving actions or purchased high efficiency equipment anyway, the matched control group is designed to ensure that the control group can be expected to exhibit the same degree of energy conserving behavior and purchases. Thus, there is no free ridership, and no “net-to-gross” adjustment is necessary.⁹

By linking program participation to measured outcomes, the HER program offers a way to overcome the difficulty in linking outcomes with program implementation as has occurred with strictly educational programs as well as measure-based programs such as the Energy Star programmable thermostat specification.

Furthermore, since customers are voluntarily electing to respond to the materials provided by this program, the energy savings impact of the program is strong evidence that they consider the overall program to represent a higher level of service. To the extent that some aspects of the program (a less comfortable temperature, for example) might represent lower service to some customers, it is reasonable to assume that other aspects of the program (greater assurance that they are not wasting energy) compensate those customers in terms of overall service, otherwise they would not choose to respond to the program.

Conclusion and Recommendations

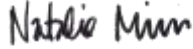
SACE encourages the Commission to approve Duke Energy’s Residential Neighborhood, Appliance Recycling, and My Home Energy Report programs. With respect to the Residential Neighborhood program, SACE recommends that Duke Energy (i) coordinate the Residential Neighborhood Program with appropriate agencies to address code and safety issues and (ii)

⁸ A new Energy Star Climate Controls specification is currently under development.

⁹ Exhibit 2 of this application.

consider identifying holistic building envelope measures. SACE also recommends that the Commission consider removing the neighborhood eligibility restriction as unnecessary due to the overall cost-effectiveness of the program.

Sincerely,

A handwritten signature in dark ink, appearing to read "Natalie Mims".

Natalie Mims
Energy Policy Manager
Southern Alliance for Clean Energy

cc: Dan F. Arnett, Chief of Staff, SC ORS
Florence P. Belser, Esquire, SC ORS
Charles A. Castle, Senior Counsel, Duke Energy Carolinas, LLC
Timika Shafeek-Horton, Deputy General Counsel, Duke Energy Carolinas